

AMENDMENTS TO THE CLAIMS

Claims pending:

- At time of the Office Action: Claims 1-25.
- After this Response: Claims 1-10, 12-16, and 26-28.

Canceled claims: 11 and 17-25.

Amended claims: 1, 9, 12, and 14-16.

New Claims: 26-28.

1. (Currently Amended) A locking actuator comprising:
a piston adapted to be moved by a drive mechanism, the piston having a first end and a second end, the second end being adapted to link to an apparatus to be driven by the actuator, the piston defining a recess originating proximal the first end;
a strut having a base and a tip, the strut adapted to at least partially nest within the recess, the strut adapted to hold at least one locking mechanism proximal to the tip; and;
at least one locking mechanism held by the strut, the at least one locking mechanism adapted to move into a first position engaging the piston when the actuator is locked and adapted to move to a second position not engaging the piston when the actuator is unlocked.
2. (Original) The locking actuator of Claim 1, wherein the drive mechanism includes a first hydraulically pressurized cylinder adapted to move the piston.

3. (Original) The locking actuator of Claim 1, wherein the locking mechanism includes at least one locking key adapted to engage the piston when the actuator is locked.

4. (Original) The locking actuator of Claim 1, wherein the locking mechanism engages the piston when the piston is in an extended position.

5. (Original) The locking actuator of Claim 1, further comprising a shaft movably held within the strut, the shaft being adapted to move the locking mechanism between the first position and the second position.

6. (Original) The locking actuator of Claim 5, wherein the shaft defines a ramp proximal the tip of the strut, the ramp being adapted to move the locking mechanism between the first position and the second position.

7. (Original) The locking actuator of Claim 5, further comprising a second hydraulically pressurized cylinder linked to the shaft, the second hydraulic cylinder being arranged to move the shaft within the strut, such that the at least one locking key is moved between the first position and the second position.

8. (Original) The locking actuator of Claim 5, further comprising a spring arranged to bias the shaft, the spring being arranged to move the shaft within the strut, such that the at least one locking key is moved between the first position and the second position.

1 9. (Currently Amended) A locking actuator comprising:

2 a piston having a longitudinal axis with a first length, the piston having a
3 first end and a second end, the first end being adapted to be moved by a drive
4 mechanism and the second end being adapted to link to an apparatus to be driven
5 by the actuator, the piston defining a recess originating at the first end and
6 extending along the longitudinal axis, the recess having a second length less than
7 or equal to the first length, the piston further defining at least one groove
8 projecting from the recess into the piston approximately perpendicular to the
9 longitudinal axis, the at least one groove located proximal to the first end;

10 a strut having a base and a tip, the strut being adapted to project into the
11 recess, the strut being adapted to movably hold at least one locking key proximal
12 to the tip; and

13 at least one locking key movably held by the strut, the at least one locking
14 key being adapted to move into a first position engaging the at least one groove
15 when the actuator is locked and adapted to move to a second position not engaging
16 the at least one groove when the actuator is unlocked; and

17 a shaft movably held within the strut, the shaft extending from proximal the
18 base of the strut to proximal the tip of the strut, the shaft being adapted to move
19 the at least one locking key between the first position and the second position.

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21 10. (Original) The locking actuator of Claim 9, wherein the drive
22 mechanism includes a first hydraulically pressurized cylinder surrounding the first
23 end.

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25 11. (Canceled)

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2 12. (Currently Amended) The locking actuator of Claim 119, wherein
3 the shaft defines a ramp proximal the tip of the strut, the ramp being adapted to
4 move the at least one locking key between the first position and the second
5 position.

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7 13. (Original) The locking actuator of Claim 12, wherein the ramp
8 includes a top and a bottom, the top being adapted to hold the at least one locking
9 key in the at least one groove when the locking key is in the second position.

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11 14. (Currently Amended) The locking actuator of Claim 119, further
12 comprising a lever linked to the shaft, the lever being arranged to move the shaft
13 within the strut, such that the at least one locking key is moved between the first
14 position and the second position.

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16 15. (Currently Amended) The locking actuator of Claim 119, further
17 comprising:

18 a second hydraulic cylinder linked to the shaft, the second hydraulic
19 cylinder arranged to move the shaft within the strut, such that the at least one
20 locking key is moved between the first position and the second position.

1 16. (Currently Amended) The locking actuator of Claim 149, further
2 comprising:

3 a spring arranged to bias the shaft, the spring arranged to move the shaft
4 within the strut, such that the at least one locking key is moved between the first
5 position and the second position.

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7 17-25. (Canceled)

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9 26. (New) A locking actuator comprising:

10 a piston having a first end and a second end, the second end being adapted
11 to link to an apparatus to be driven by the actuator, the piston defining a recess
12 originating proximal the first end;

13 a strut having a base and a tip, the strut adapted to at least partially nest
14 within the recess, the strut adapted to hold at least one locking mechanism
15 proximal to the tip;

16 at least one locking mechanism held by the strut, the at least one locking
17 mechanism adapted to move into a first position when the actuator is locked and
18 adapted to move to a second position when the actuator is unlocked;

19 a shaft movably held within the strut, the shaft extending from proximal the
20 base of the strut to proximal the tip of the strut, the shaft being adapted to move
21 the at least one locking key between the first position and the second position; and

22 a lever linked to the shaft, the lever being arranged to move the shaft within
23 the strut, such that the at least one locking key is moved between the first position
24 and the second position.

1 27. (New) The locking actuator of Claim 26, wherein the shaft defines a
2 ramp proximal the tip of the strut, the ramp being adapted to move the at least one
3 locking key between the first position and the second position.

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5 28. (New) The locking actuator of Claim 27, wherein the ramp includes
6 a top and a bottom, the top being adapted to hold the at least one locking key in
7 the at least one groove when the locking key is in the second position.
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